Special Issue

Magnetic and Structural Properties of Ferromagnetic Thin Films

Message from the Guest Editors

Thin film magnetism has led to fundamental advances in the physics of magnetism as well as important technological applications. With the rapid development of deposition and characterisation techniques, new phenomena were discovered, such as the GMR effect, which made a crucial contribution to the storage technology which paved the way for growing research on spin-dependent phenomena and the emergence of the field of spintronics. Spintronic devices rely on the control of spin-polarized currents which, on a magnetic film, may induce magnetization reversal or dynamics without the need for an external magnetic field. This Special Issue is dedicated to magnetic properties of thin films such as fundamental properties, e.g., the magnetic moment and magnetic anisotropy. It will cover phenomena including, but not limited to, those that arise from the spin-orbit coupling that encompasses magnetocrystalline anisotropy, magnetic damping/relaxation, orbital moment or spin-orbit torques.

Guest Editors

Dr. Voicu Octavian Dolocan

Institut Matériaux Microélectronique Nanosciences de Provence (IM2NP); Aix-Marseille Université, Marseille, France

Dr. Sylvain Bertaina

CNRS, IM2NP (UMR 7334), Institut Matériaux Microélectronique et Nanisciences de Provence; Aix-Marseille Université, 13013 Marseille, France

Deadline for manuscript submissions

closed (10 December 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/72914

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

MDPI

About the Journal

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian
1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)